User characteristics:

Since satisfying the needs and desires of the users is the primary goal of bicycle planning, planners must learn as much as possible about the different groups who ride. Four main approaches are useful in gathering the necessary data: surveys, bicycle counts, behavioral observations and crash studies.

User surveys: User surveys give information on bicyclists' and non-bicyclists' attitudes, demographic characteristics and, to some extent, behavior. Demographic data of interest would include respondents' ages, sex, education, occupation and patterns of bicycle ownership.

Attitude data would include perceptions of cycling problems and interest in new opportunities for bicycle use. Behavior data would include factors like current levels of bicycle use, bicycling purposes, distances traveled and helmet and headlight use.

Since surveys must be carefully crafted if they are to be valid, it is important to get expert help. However, such assistance need not be expensive. For example, a local university professor may agree to give such a project to his or her students. Other opportunities for collecting affordable survey data may involve collaborating with similar agencies or public interest groups. Sharing costs will reduce the amount spent by each participant.

Three primary approaches for surveying bicyclists are telephone surveys, mail surveys and face-to-face surveys.

Telephone surveys: Telephone surveys involve calling a random sample of residents and asking a set of standardized questions. Phone surveys have the advantage of involving an operator in a central location, and they are relatively fast to conduct. This helps keep the costs down. However, phone interviewers get no visual clues by which to judge the answers, and getting a representative sample may be difficult depending on phone ownership patterns. Also, it is difficult to spend much time with the person being interviewed.

Mail surveys: Mail surveys involve distributing a printed survey form to a sample of residents and asking respondents to return the survey when completed. Mail surveys involve relatively low costs and provide a geographical distribution of residents. They are easy for respondents to complete and time is less of a factor. Standardization is a benefit, in terms of collecting statistics. However, it is difficult to ask open-ended questions which may need follow-up. In addition, response rates are generally low.

Face-to-face surveys: Face-to-face surveys involve personally asking respondents a set of questions. This approach is a good way to get answers to complex questions, since it allows the interviewer to ask probing follow-up questions. However, face-to-face surveys are time consuming, and uncontrolled factors, like the personal interaction with the interviewer and differences between the approaches of multiple interviewers, may affect the results.

Bicycle counts: Doing bicycle counts will help to determine baseline levels of current use. By identifying locations with high or low use, it is possible to determine where bicycle improvements are most likely to fill an existing need. At the same time, bicycle counts will not identify latent demand. Such information is best gathered through user surveys.

The first step is to identify key corridors for bicycle travel. Since there is likely to be little data on the subject, locations should be chosen based on intuition and a general feel for where bicyclists are likely to be found (e.g., near universities and schools, passing over key bridges, etc.). Within these corridors, one should identify locations where the most useful data may be gathered. For example, it may be important to know if bicyclists generally turn or go straight through a particular intersection. Next, it is important to decide on a time for counting. If recreational use is important, evening and weekend hours will be important. If utilitarian riding is important, commute times (for work and school) will be important.

Records of the bicycle counts should be kept in a safe place where they may be found in future years. The value of routine bicycle counts lies primarily in their ability to show change over time. Increases in bicycle use in a